

73314-10

7/1/2014

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Biopesticides and Pollution Prevention Division (7511P)  
1200 Pennsylvania Avenue NW  
Washington, D.C. 20460

EPA  
Registration  
Number:  
  
73314-10

Date of Issuance:  
  
JUL 01 2014

Term of  
Issuance: Unconditional

Name of Pesticide Product:  
  
CHROMO™ Bio-Insecticide

NOTICE OF PESTICIDE:

Registration  
 Reregistration  
(under FIFRA, as amended)

Name and Address of Registrant (include ZIP Code):

Micah T. Reynolds, Senior Regulatory Consultant  
Technology Sciences Group Inc. (TSG) Agent for  
Novozymes BioAg, Inc.  
13100 W. Lisbon Rd, Suite 600  
Brookfield, Wisconsin, 53005

Note: Changes in labeling, differing in substance from that accepted in connection with this registration, must be submitted to and accepted by the Biopesticides and Pollution Prevention Division prior to use of the label in commerce. In any correspondence on this product, always refer to the above EPA Registration Number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA or the Act). Registration is in no way to be construed as an endorsement or recommendation of this product by the Environmental Protection Agency (EPA or the Agency). In order to protect health and the environment, the Administrator, on his or her motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This registration does not eliminate the need for continual reassessment of the pesticide. If EPA determines at any time that additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under section 3(c)(2)(B) of FIFRA.

This product is unconditionally registered in accordance with FIFRA section 3(c)(5) and is subject to the following terms:

1. Batch to batch quality control testing of contaminants will utilize undiluted samples on spread plates or in enrichment cultures.
2. Submit two (2) copies of the final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for further description of final printed labeling.

Signature of Approving Official:

Robert McNally, Director  
Biopesticides and Pollution Prevention Division

Date:

7/1/14

Novozymes BioAg, Inc.  
EPA Reg. No. 73314-10

3. Submit the following confirmatory data on Chromo™ Bio-Insecticide by the due date specified below. These data must be determined by EPA to be acceptable.

Study Type	Required Data/Information	Due Date
Storage Stability (Guideline Number 830.6317)	Provide the results of one-year storage stability and corrosion characteristics testing and include microbial contaminant analysis. The microbial contaminant analysis must be from an undiluted sampling of the product.	August 1, 2015
Corrosion Characteristics (Guideline Number 830.6320)		
Discussion of Formation of Unintentional Ingredients (Guideline Number 885.1300)		

A stamped copy of the label is enclosed for your records.

Sincerely,



Robert McNally, Director  
Biopesticides and Pollution Prevention Division (7511P)

- Enclosures (2):
- CHROMO™ Bio-Insecticide Accepted Label
  - A-79 Enclosure

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(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

# CHROMO™ BIO-INSECTICIDE

**Sublabel A: Greenhouse, Nursery, Turf Grass, and Agricultural Use**  
**Sublabel B: Residential/Home & Garden Use**  
**Optional Label Claims**

**ACTIVE INGREDIENT:**

*Chromobacterium subtsugae* strain PRAA4-1<sup>T</sup> cells and spent fermentation media\*.....100.00%  
TOTAL..... 100.00%

\*Contains not less than 1 X 10<sup>6</sup> colony forming units per gram. [The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.]

**KEEP OUT OF REACH OF CHILDREN**

See [back] [side] [other] panel for [additional precautionary statements] [and directions for use].

**EPA Reg. No.:** 73314-10

**EPA Establishment No.:** 73314-TX-001

[NOVOZYMES RETHINK TOMORROW] [LOGO]

Novozymes BioAg, Inc.  
13100 W. Lisbon Road, Suite 600  
Brookfield, Wisconsin 53005  
(XXX) XXX-XXXX

**ACCEPTED**

JUL 01 2014

Under the Federal Insecticide, Fungicide,  
and Rodenticide Act, as amended, for  
the pesticide registered under  
EPA Reg. No. 73314-10

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(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

**SUBLABEL A: Greenhouse, Nursery, and Agricultural Use**

(Front Panel)

**CHROMO™ BIO-INSECTICIDE**

**(Alternate Brand Names: TBD)**

**ACTIVE INGREDIENT:**

<i>Chromobacterium subtsugae</i> strain PRAA4-1 <sup>T</sup> cells and spent fermentation media*	100.00%
TOTAL	100.00%

\*Contains not less than 1 X 10<sup>6</sup> colony forming units per gram. [The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.]

**KEEP OUT OF REACH OF CHILDREN**

See [back] [side] [other] panel for [additional precautionary statements] [and directions for use].

EPA Reg. No.: 73314-10

EPA Establishment No.: 73314-TX-001

[NOVOZYMES RETHINK TOMORROW] [LOGO]

Novozymes BioAg, Inc.

13100 W. Lisbon Road, Suite 600

Brookfield, Wisconsin 53005

(XXX) XXX-XXXX

Net Contents:

[Lot] [Batch] [No][Expiry date – 11 months from date of manufacture stamp or date stamp is 11 months from date of manufacture] (Note to reviewer: Lot or Batch number and expiry date may appear on label or printed directly on packaging.)

(Note to Reviewer: First Aid Statements and Signal Word removed since all acutes are Tox Category IV.)

ACCEPTED

(Back Panel)

**PRECAUTIONARY STATEMENTS**

**Hazards to Humans and Domestic Animals. CAUTION.** Avoid contact with skin, eyes, or clothing.

Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating,

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(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

**Personal Protective Equipment (PPE):**

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves

Mixer/loaders and applicators must wear a dust/mist-filtering respirator meeting NIOSH standards of at least N-95, R-95, or P-95. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides (40 CFR 170.240(d)(4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

**User Safety Recommendations**

**Users should:**

- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. If gloves are worn, wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

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### ENVIRONMENTAL HAZARDS

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

This product is toxic to aquatic invertebrates. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. This product is toxic to certain nontarget terrestrial arthropods. Minimize spray drift away from target area to reduce effects to nontarget insects.

For terrestrial uses: Do not apply directly to water or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

#### Agricultural Use Requirements

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of four (4) hour or until solution has dried.

For early entry into treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, wear:

- Coveralls
- Waterproof gloves
- Shoes plus socks

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### Non-Agricultural Use Requirements

The requirements in this box apply to uses of the product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Keep unprotected persons out of treated areas until sprays have dried.

### PRODUCT INFORMATION:

[Chromo Bio-Insecticide] [This product] is a biological insecticide/miticide containing fermentation solids of *Chromobacterium subtsugae* strain PRAA4-1<sup>T</sup> for use on ornamental plants, turf and edible crops against the pests listed in this label. [Chromo Bio-Insecticide] [This product] functions primarily as a stomach disrupter for use in the control or suppression of many foliar-feeding pests, including caterpillars, foliage-feeding coleopteran, chrysomelidae, lepidopterae, aphids, whiteflies and plant-sucking mites. [Chromo Bio-Insecticide] [This product] must be mixed with water and applied as a foliar spray with ground or aerial equipment equipped for conventional insecticide spraying, by chemigation, and by seed and soil treatments. [Chromo Bio-Insecticide] [This product] can also be applied post-harvest to protect harvested commodities from continued or new infestation.

### USE INSTRUCTIONS:

[Chromo Bio-Insecticide] [This product] is a highly selective insecticide/miticide for use against listed insects and mites. Thorough coverage of infested plant parts is necessary for effective control. [Chromo Bio-Insecticide] [This product] does not have systemic activity. For some crops, directed drop nozzles by ground machine are required. Under heavy pest populations, use the higher label rates, shorten the spray interval, and/or increase the spray volume to improve coverage.

Repeat application at an interval sufficient to maintain control, usually 3-14 days depending upon plant growth rate, insect and mite activity, and other factors. If attempting to control an insect population with a single application, make the treatment when egg hatch is essentially complete but before economic damage occurs.

To enhance control, consider tank mixing with contact insecticides/miticides. Use the lower label rates of [Chromo Bio-Insecticide] [this product] when populations are low and when tank-mixing with other insecticides/miticides. Use the higher rates of [Chromo Bio-Insecticide] [this product] when applied stand-alone, when target pest populations are high, or when egg numbers are high. For hard-to-wet crops, consider using a spreader/sticker or adjuvant, which has been approved for targeted crop use, to enhance adhesion of [Chromo Bio-Insecticide] [this product] to the crop.

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

[Chromo Bio-Insecticide] [This product] has been evaluated for phytotoxicity on a variety of crops under various normal growing conditions. However, testing all crop varieties, in all mixtures and combinations, is not feasible. Prior to treating entire crop, test a small portion of the crop for sensitivity.

**INTEGRATED PEST MANAGEMENT (IPM):**

Integrate [Chromo Bio-Insecticide] [this product] into an overall pest management strategy whenever insecticide use is necessary. Follow practices known to reduce [insect populations] development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location.

**USE RATE DETERMINATION:**

Carefully read and follow all label directions, use rates, and restrictions. Close scouting and early attention to insect infestations are necessary for application timing and effective control. Proper timing of application targeting newly hatched larvae is important for optimal results. For proper foliar application, determine the number of [acres] [square feet] to be treated, the specified label use rate, and select the appropriate gallonage to give thorough and uniform coverage of all plant parts to be protected. For proper soil application, determine the number of [acres] [square feet] to be treated, the specified label use rate, and select the appropriate gallonage to give good saturation of the soil. Prepare only the amount of spray or soil drench solution to treat the measured area. Accurate spray equipment calibration is essential prior to use.

**PREHARVEST INTERVAL:**

[Chromo Bio-Insecticide] [This product] can be applied up to and including the day of harvest.

**GENERAL APPLICATION DIRECTIONS:**

**Compatibility:**

Chromo Bio-Insecticide is compatible with many commonly used pesticides, fertilizers, adjuvants, and surfactants, but has not been evaluated with all potential combinations. To ensure compatibility of adjuvants or surfactants, they must be evaluated prior to use. To ensure compatibility of tank mix combinations, evaluate prior to use as follows: Using a suitable container, add the proportional amounts of product to water. Add wettable powders first, then water dispersible granules, then liquid flowables, and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the mix in a small portion of the treatment area to ensure that a phytotoxic response will not occur as a result of the application. Once compatibility has been proven, use the same procedure for adding required ingredients to the mix tank. Do not combine Chromo Bio-Insecticide with pesticides, adjuvants, surfactants, or fertilizers unless prior

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experience has shown the combination to be physically compatible, effective, and non-injurious under conditions of use.

[Chromo Bio-Insecticide] [This product] can be used in combination with or in rotation with other insecticides, miticides, herbicides, fungicides, fertilizers, or micronutrients. Do not pre-mix [Chromo Bio-Insecticide] [this product] with any other tank-mix component prior to adding to the spray tank. Consult other product's labels for additional information or restrictions concerning tank mixing. Observe the most restrictive of the labeling limitations and precautions of all products used in mixtures. Do not exceed label dosage rates. This product cannot be mixed with any product containing a label prohibition against such mixing.

**Application Uses and Methods:**

Apply [Chromo Bio-Insecticide] [this product] throughout the growing season and post-harvest on greenhouse and outdoor ornamentals, trees and shrubs, nursery crops, turf, and production agriculture crops listed in the "Crops on Which Chromo Bio-Insecticide May be Used" section. Chromo Bio-Insecticide may be applied through a variety of methods including ground spray, aerial application, chemigation, and seed and soil treatment. Application methods and instructions are described in detail in subsequent sections of this label.

See GROUND APPLICATION section for ground and foliar spray application use directions.

See AERIAL APPLICATION section for aerial application use directions.

See CHEMIGATION section for chemigation use directions.

See SEED TREATMENT section for seed treatment use directions.

See SOIL TREATMENT section for soil application use directions.

**GROUND APPLICATION**

Apply [Chromo Bio-Insecticide] [this product] in ground equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. The amount of water needed per acre will depend upon crop development, weather, application equipment, and local experience. Do not spray when wind speed favors drift beyond the area intended for use. Avoiding spray drift is the responsibility of the applicator.

**Mixing directions**

Important – Do not add [Chromo Bio-Insecticide] [this product] to the mix tank before introducing 1/2 - 3/4 of the desired amount of water. Add water to the mix tank. Start the mechanical or hydraulic agitation to provide moderate circulation before adding [Chromo Bio-Insecticide] [this product] . Add the desired

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volume of [Chromo Bio-Insecticide] [this product] to the mix tank according to the use rate in the "Crops on Which Chromo Bio-Insecticide May be Used" section, and continue circulation. Maintain circulation while loading and spraying. Do not mix more [Chromo Bio-Insecticide] [this product] than can be used in 24 hours. Use a strainer no finer than 50 mesh in conventional spray systems.

#### **Spray volume**

For conventional ground applications, use at least 10 gallons of total volume per acre in water-based sprays.

### **AERIAL APPLICATION**

Apply [Chromo Bio-Insecticide] [this product] in aerial equipment with quantities of water sufficient to provide thorough coverage of infested plant parts. The amount of water needed per acre will depend upon crop development, weather, application equipment, and local experience. Do not spray when wind speed favors drift beyond the area intended for use. Avoiding spray drift is the responsibility of the applicator.

#### **Mixing directions**

Important – Do not add [Chromo Bio-Insecticide] [this product] to the mix tank before introducing  $\frac{1}{2}$  -  $\frac{3}{4}$  of the desired amount of water. Add water to the mix tank. Start the mechanical or hydraulic agitation to provide moderate circulation before adding [Chromo Bio-Insecticide] [this product]. Add the desired volume of [Chromo Bio-Insecticide] [this product] to the mix tank according to the use rate in the "Crops on Which Chromo Bio-Insecticide May be Used" section, and continue circulation. Maintain circulation while loading and spraying. Do not mix more [Chromo Bio-Insecticide] [this product] than can be used in 24 hours. Use a strainer no finer than 50 mesh in conventional spray systems.

#### **Spray volume**

For conventional air applications, use at least 10 gallons of total volume per acre in water-based sprays.

### **AERIAL DRIFT REDUCTION INFORMATION**

**GENERAL:** Avoiding spray drift at the application site is the responsibility of the applicator (specifically, see **SENSITIVE AREAS** section for the requirement regarding spray drift and honey bees). The interaction of many equipment- and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed.

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Do not apply directly to aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, ponds, estuaries, and commercial fish ponds).

**INFORMATION ON DROPLET SIZE:** Use only medium or coarser spray nozzles according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size. The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply the largest droplets that will provide sufficient coverage and control. Applying larger droplets reduces drift potential, but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

**CONTROLLING DROPLET SIZE:** Volume: Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with the higher rated flows produce larger droplets. Pressure: Do not exceed the nozzle manufacturer's specified pressures. For many nozzle types, lower pressure produces droplets. When high flow rates are needed, use higher flow rate nozzles instead of increasing pressure. Number of Nozzles - Use the minimum number of nozzles that provide uniform coverage. Nozzle orientation - Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential. Nozzle type - Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

**BOOM WIDTH:** For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade.

**APPLICATION HEIGHT:** Do not make a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of the droplets to evaporate and wind. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

**SWATH ADJUSTMENT:** When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

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**WIND:** Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph. Drift potential is lowest between wind speeds of 2 to 10 miles per hour. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 miles per hour due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect drift.

**TEMPERATURE AND HUMIDITY:** When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

**TEMPERATURE INVERSIONS:** Do not apply during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

**SENSITIVE AREAS:** This pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas). Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, non-target crops, blooming crops or weeds that bees are visiting, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

**CHEMIGATION USE DIRECTIONS**

Apply [Chromo Bio-Insecticide] [this product] at a rate of 1/4-2 gallons per acre (or 1/4-2 gallons per 100 gallons of water) according to the instructions below unless specified differently in the "Crops on Which Chromo Bio-Insecticide May be Used" section.

**Spray preparation:**

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First, prepare a suspension of [Chromo Bio-Insecticide] [this product] in a mix tank. Fill tank 1/2 to 3/4 of the amount of water for the area to be treated. Start mechanical or hydraulic agitation. Add the required amount of [Chromo Bio-Insecticide] [this product], and then the remaining volume of water. Then set the system to deliver a minimum of 0.1 to 0.3 inch of water per acre. Start system and uniformly inject the suspension of [Chromo Bio-Insecticide] [this product] into the irrigation water line so as to deliver the desired rate of [Chromo Bio-Insecticide] [this product] per acre. Inject the suspension of [Chromo Bio-Insecticide] [this product] with a positive displacement pump into the main line ahead of a right angle turn to ensure adequate mixing. [Chromo Bio-Insecticide] [This product] is to be metered continuously for the duration of the water application. If you have any questions about calibration, contact State Extension Service specialists, equipment manufacturers or other experts.

**[GREENHOUSE AND NURSERY] [TURF] [GOLF COURSE] [FIELD] CHEMIGATION**

**General Requirements:**

- Apply [Chromo Bio-Insecticide] [this product] at a rate of 1/4-2 gallons per 100 gallons of water, depending on desired application.
- Apply [Chromo Bio-Insecticide] [this product] only through 1) overhead boom and mist-type systems, 2) sprinklers such as impact or micro-sprinklers, central pivot, lateral move, end tow, side wheel roll, traveler, solid set, big gun, or hand-move systems, 3) pressurized drench (flood) or drip (trickle) systems, 4) micro irrigation such as spaghetti tube or individual tube irrigation, 5) hand-held calibrated irrigation equipment such as hand-held wand with injector, and 6) ebb and flow systems. Do not apply this product through any other type of irrigation system.
- Plant injury or lack of effectiveness can result from non-uniform distribution of treated water.
- If you have questions about calibration, you should contact State Extension Service specialists; equipment manufacturers or other experts.
- Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
- A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

**Requirements for Chemigation Systems Connected to Public Water Systems:**

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- 1) Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- 2) Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the flow outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
- 3) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 4) The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 5) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Do not apply when wind speed favors drift beyond the area intended for treatment, when system connections or fitting leak, when nozzles do not provide uniform distribution or when lines containing the product must be dismantled or drained.
- 8) Continuous agitation is not required in pesticide supply tanks unless tank mixing with other products or fluid fertilizers that require it.

**Requirements for Sprinkler Chemigation:**

- 1) The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to

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prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

- 4) The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Continuous agitation is not required in pesticide supply tanks unless tank mixing with other products or fluid fertilizers that require it.

**Requirements for Drip (Trickle) Chemigation:**

- 1) The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
- 2) The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- 3) The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- 4) The system must contain functional inter-locking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- 5) The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- 6) Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 7) Use of a supply tank is recommended. Continuous agitation is not required in pesticide supply tanks unless tank mixing with other products or fluid fertilizers that require it.

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**Requirements for Flood Chemigation:**

- 1) Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from back flow if water flow stops.
- 2) Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:
  - a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from back flow.
  - b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
  - c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
  - d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
  - e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
  - f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
- 3) Use of a supply tank is recommended. Continuous agitation is not required in pesticide supply tanks unless tank mixing with other products or fluid fertilizers that require it.

**Application Instructions for All Types of Chemigation:**

- 1) Remove scale, pesticide residues, and other foreign matter from the chemical supply tank and entire injector system. Flush with clean water. Failure to provide a clean tank, void of scale or residues may cause product to lose effectiveness or strength.
- 2) Determine the treatment rates as indicated in the directions for use and make proper dilutions.
- 3) To mix in supply tank, fill tank half way with water and add product. Stir until completely dispersed. Fill tank with remaining amount of water.
- 4) Application of the product may be made continuously for the duration of the water application or can be applied at the end or after the water application.

17/40

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

**Application Instructions for Drip (Trickle) Chemigation:**

- 1) Ensure the system provides uniform waterflow.
- 2) Irrigate crop with sufficient water to wet the root zone. Then, begin flow of the solution containing product from the chemical tank for a period to uniformly distribute the material.

**SEED TREATMENT USE DIRECTIONS**

Chromo Bio-Insecticide can be applied as a seed dressing for suppression of insect damage. [Chromo Bio-Insecticide] [This product] may be applied as a water-based slurry with other registered seed treatment insecticides and fungicides through standard slurry- or mist-type commercial seed treatment equipment.

**Mixing instructions:** Prepare no more mixture than is required for the immediate operation. Agitate the solution continuously during mixing and application. Mechanical mixing is recommended for proper mixing of Chromo Bio-Insecticide mixtures.

**Chromo Bio-Insecticide alone:** Add ½ of the required amount of water to the mix tank. With the agitator running, add Chromo Bio-Insecticide at a rate of 1-2 gallons per 100 gallons of water to the mix tank. Continue agitation while adding the remainder of the water. Begin application of the solution after Chromo Bio-Insecticide has completely dispersed into the mix water. Maintain agitation until all the mixture has been applied.

**Chromo Bio-Insecticide + tank-mixtures:** Add ½ of the required amount of water to the mix tank. Start the agitation before adding any tank mix partners. In general, tank-mix partners should be added in this order: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations. Always allow each tank-mix partner to become completely dispersed before adding the next component. Maintain continuous agitation until all components have been dispersed and throughout the application process. Add remaining amount of water prior to application. NOTE: When using Chromo Bio-Insecticide in tank-mixtures, all products in water soluble packaging should be added to the tank before any other tank-mix partner. Allow the water-soluble packaging to completely dissolve and the product(s) to completely disperse before adding any other tank-mix partner to the tank.

If using [Chromo Bio-Insecticide] [this product] in a tank mixture with other seed treatment products, observe all directions for use, crops/sites, use rates, dilution ratios, precautions, and limitations which appear on the tank-mix partner label. No label dosage may be exceeded and the most restrictive label precautions and limitations must be followed. This product should not be mixed with any product which prohibits such mixing.

18/40

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

Note: Federal law requires that bags containing treated seeds shall be labeled with the following information: "This seed has been treated with Chromo Bio-Insecticide. Do not use for food, feed, or oil purposes. Store away from feed and foodstuffs." **Treated seed bagged for later use must contain an EPA-approved dye or colorant that imparts and unnatural color to the seed.**

**SOIL TREATMENT USE DIRECTIONS**

Chromo Bio-Insecticide can be applied by soil drench, in-furrow spray, or soil injection to protect against certain soil-borne insects or nematodes. In general, Chromo Bio-Insecticide can be applied by the following methods, unless specified differently in the "Crops on Which Chromo Bio-Insecticide May be Used" section:

**Soil Drench Applications:**

Apply [Chromo Bio-Insecticide] [this product] at a concentration of ¼-2 gallons per acre (or ¼-2 gallons per 100 gallons of water) at a sufficient rate to thoroughly soak the growing media and root zone. Multiple drench applications can be made on a 10-14 day interval.

**Shanked-In and Injected Applications:**

Apply [Chromo Bio-Insecticide] [this product] at a concentration of ¼-2 gallons per acre (or ¼-2 gallons per 100 gallons of water) can be shanked-in or injected into the soil alone, or with most types of liquid nutrients.

**In-Furrow Applications:**

At planting, apply [Chromo Bio-Insecticide] [this product] as an in-furrow spray or as a 5-7 inch band (T-band) over an open furrow at the rate of ¼-2 gallons per acre or 1.8-7.35 ounces per 1000 feet of row according to the chart below. Apply [Chromo Bio-Insecticide] [this product] in 20 to 50 gallons of water so as the spray is directed over the seed furrow just before the seeds are covered.

Rate	In-Furrow and T-band Application Rates					
	Product per Acre oz.					
	30" Rows	32" Rows	34" Rows	36" Rows	38" Rows	40" Rows
Ounces per 1000 ft row	1.8-5.5	2.0-6.0	2.1-6.25	2.2-6.6	2.3-7.0	2.45-7.35

30" = 17,424 row ft./acre, 32" = 16,315 row ft./acre, 34" = 15,374 row ft./acre, 36" = 14,520 row ft./acre, 38" = 13,754 row ft./acre, 40" = 13,068 row ft./acre.

19/40

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

Chromo Bio-Insecticide alone: Add ½ of the required amount of water to the mix tank. With the agitator running, add Chromo Bio-Insecticide at a rate of 1-2 gallons per 100 gallons of water to the mix tank. Continue agitation while adding the remainder of the water. Begin application of the solution after Chromo Bio-Insecticide has completely dispersed into the mix water. Maintain agitation until all the mixture has been applied.

Chromo Bio-Insecticide + **tank-mixtures**: Add ½ of the required amount of water to the mix tank. Start the agitation before adding any tank mix partners. In general, tank-mix partners should be added in this order: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations. Always allow each tank-mix partner to become completely dispersed before adding the next component. Maintain continuous agitation until all components have been dispersed and throughout the application process. Add remaining amount of water prior to application.

### APPLICATION RATES

**Greenhouse and Nursery Applications:** Apply Chromo Bio-Insecticide at a rate of ¼-2 gallons per 100 gallons of water and spray until plants are completely covered and top 1/8 inch of soil is saturated.

**Agricultural Growing Crops:** Apply Chromo Bio-Insecticide at a rate of ¼-2 gallons per acre unless otherwise specified in the "Crops on Which Chromo Bio-Insecticide May be Used" section.

**Post-Harvest Applications:** Apply Chromo Bio-Insecticide at a rate of 1-2 gallons per 100 gallons of water and spray harvested material until just before point of runoff.

See specific application rates for each crop for additional details on greenhouse applications and for all other application types. Repeat application at an interval sufficient to maintain control, usually 3-14 days depending upon plant growth rate, insect and mite activity, and other factors.

### CROPS ON WHICH CHROMO BIO-INSECTICIDE MAY BE USED

FOR USE ON THE FOLLOWING CROPS FOR CONTROL OF SPECIFIED INSECTS AND MITES:

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#### **Alfalfa (Hay and Seed), Hay and Other Forage Crops**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Alfalfa webworm, alfalfa caterpillar, armyworms, cutworms, European skipper, sod webworm, plant bugs, spittle bugs, aphids, billbugs, chinch bug, mites (such as clover, Bermuda grass stunt, two-spotted, winter grain) and leafhoppers

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**Artichoke**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Armyworms, artichoke plume moth, loopers, aphids, whiteflies

**Asparagus**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, asparagus beetle, cutworms, spotted asparagus beetle

Asparagus beetle and spotted asparagus beetle. Apply when adults or larvae are seen feeding on new spears and during the fern stage when field counts or crop injury indicates damaging populations.

**Bananas**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Banana skipper and stink bugs

**Brassica (Cole) Leafy Vegetables**

Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Broccoli, Chinese Cabbage (Bok Choy), Chinese Cabbage (Napa), Chinese Mustard Cabbage (Gai Choy), Cauliflower, Cavalo Broccolo, Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, and Rape Greens

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Armyworms, beet armyworm, cabbage looper, cabbage webworm, cross-striped cabbageworm, cutworms, diamondback moth, imported cabbageworm, light brown apple moth, aphids, billbugs, leafhoppers, mites, plant bugs, seed corn maggot, symphylans, thrips, whiteflies, wireworms, yellow margined leaf beetle larvae

Yellow margined leaf beetle larvae – apply to newly hatched to 2<sup>nd</sup> instar. If adult beetles are also present, tank mix with a knockdown insecticide.

Root, Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or as an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with drip applications, where available, may be necessary on a 10 to 14 day schedule. Please refer to drip chemigation instructions.

**Bulb Vegetables**

Leek, Garlic, Onion (Bulb and Green) and shallot

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

21/40

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

Aphids, loopers, omnivorous leafroller, hornworm, imported cabbageworm, diamondback moth, green cloverworm, webworms, saltmarsh caterpillar, armyworms, cutworms, cross-striped cabbageworm, Heliothis, European corn borer, leek moth, thrips, seed corn maggot, symphylans, wireworms, onion maggot, seed corn maggot

Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant-in furrow drench application in 100 to 150 gallons of water per acre or as in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with drip applications, where available, may be necessary on a 10 to 14 day schedule. Please refer to drip chemigation instructions.

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**Bushberries**

Blueberry, Currant, Gooseberry, Huckleberry, Elderberry, Juneberry, Ligonberry, and Salal

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, cherry fruitworm, cranberry fruitworm, fireworms, leafrollers, loopers, thrips, stink bugs, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles

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**Caneberries**

Blackberry, Loganberry, Red and Black Raspberry, and Cultivars, Varieties and/or Hybrids of These

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, beet armyworm, bertha armyworm, green fruitworm, leafrollers, loopers, western raspberry fruitworm, armyworms, thrips, stink bugs, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles

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**Cereal Grains**

Barley, Buckwheat, Oats, Pearl Millet, Proso Millet, Rye, Sorghum (Milo), Triticale and Wheat

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids (including greenbug), armyworms, cereal leaf beetle adults and larvae, chinch bugs and mites, corn earworm (headworm), southwestern corn borer, thrips, web worms

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**Citrus Fruit**

Grapefruit, Lemons, Limes, Oranges, Tangerines, Tangelo, Pummelo

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, California red scale, Florida red scale, two-spotted spider mite, Texas citrus mite, citrus leafminer, citrus cutworm, citrus red mite, citrus rust mite, six-spotted spider mite, Asian citrus psyllid, citrus whitefly,

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

cloudy-winged whitefly, citrus blackfly, citrus thrips, fruit tree leafroller, mealybugs, orangedog, stink bug, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles, glassy winged sharpshooter.

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**Corn (Field corn, Sweet Corn, Popcorn and corn Grown for Seed)**

1/4-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Armyworms, European corn borer, southwestern corn borer, western bean cutworm, corn earworm, webworms, common stalk borer, lesser cornstalk borer, Corn leaf aphid, stink bugs, thrips, mites, chinch bugs and corn rootworm beetles, cutworms, seed corn beetle, seed corn maggot, symphylans, wireworms  
Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary.

**SEED TREATMENT FOR CORN**

Use 1/4-5 gallons CHROMO BIO-INSECTICIDE™ per 100 lbs seed applied according to the directions in the SEED TREATMENT USE DIRECTIONS for the suppression of soil dwelling pests including seed corn maggot, corn rootworm larvae, wireworms and plant-parasitic nematodes.

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**Cotton**

1/4-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Cotton aphid, cutworms, European corn borer, cotton bollworm, cotton fleahopper, tobacco budworm, loopers (soybean and cabbage), Lygus, leafhoppers, mites, saltmarsh caterpillar, seed corn maggot, silverleaf whitefly, thrips, fall armyworm, wireworms, yellow-striped armyworm.

Root Knot Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or as a ground in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary.

**SEED TREATMENT FOR COTTON**

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

Use 1/4-5 gallons CHROMO BIO-INSECTICIDE™ per 100 lbs seed applied according to the directions in the SEED TREATMENT USE DIRECTIONS for the suppression of soil dwelling pests including seed maggots, wireworms and plant-parasitic nematodes.

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**Cranberry**

1/4-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, brown spanworm, cranberry blossom weevil, cranberry fruitworm, cutworms, leafrollers, fireworms, flea beetles, fruit flies, adult Japanese beetles, loopers, mites, sparganthis fruitworm, spotted wing drosiphilia, thrips

Do not apply to flooded fields.

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**Cucurbit Vegetables**

Cucumber, Edible Gourds, Muskmelon, Cantaloupe, Pumpkin, Watermelon, and Winter and Summer Squash

1/4-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, cabbage looper, melonworm, pickleworm, rindworm complex, corn earworm, cutworms, cucumber beetle, flea beetles, mites, seed corn maggot, spotted wing drosophila, stink bugs, symphylans, thrips, whiteflies, wireworms, adult Japanese beetles

Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with drip applications, where available, may be necessary on a 10 to 14 day schedule. Please refer to drip chemigation instructions.

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**Fig**

1/4-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, navel orangeworm, thrips, stink bugs, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles

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**Flowers, Bedding Plants and Ornamentals – ground application only to non-blooming plants**

1/4-2 gallons of CHROMO BIO-INSECTICIDE™ per acre or 1/4-2 gallons of CHROMO BIO-INSECTICIDE™ per 100 gallons of water

29/40

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

Loopers, tobacco budworm, omnivorous looper, omnivorous leafroller, diamondback moth, Armyworm, ello moth, lo moth, oleander moth, azalea caterpillar, Whiteflies, aphids, thrips, azalea lace bug, Lygus, mites

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**Fruiting Vegetables**

Tomato, Tomatillo, Pepper, Groundcherry, Pepino, Okra and Eggplant

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, cutworms, Colorado potato beetle larvae, loopers, hornworms, tomato fruitworm, variegated cutworm, saltmarsh caterpillar, armyworms (including beet and yellow-striped), tomato pinworm, European corn borer, mites, stink bugs, Lygus, pepper weevil, whiteflies, plant bugs, psyllids, thrips, spotted wing, drosophila, fruit flies, flea beetles, seed corn maggot, symphylans, wireworms, adult Japanese beetles

Colorado potato beetle larvae – apply to newly hatched to 2<sup>nd</sup> instar larvae. If adult beetles are also present, tank-mix with a knockdown insecticide.

Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or as an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with drip applications where available may be necessary on a 10 to 14 day schedule. Please refer to drip chemigation instructions.

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**Grape, amur river grape, gooseberry, kiwifruit, maypop, schisandra berry**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Grape leaf skeletonizer, grape leafroller, omnivorous leafroller, orange tortrix, oblique-banded leafroller, grape berry moth, light brown apple moth, Pacific spider mite, Willamette spider mite, two-spotted spider mite, mites, mealybugs, stink bugs, glassy-winged sharpshooter, whiteflies and thrips, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles

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**Herbs and Spices**

Angelica, Balm, Basil, Borage, Burnet, Camomile, Catnip, Chervil, Chive, Clary, Coriander, Costmary, Cilantro, Curry, Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage, Marjoram, Nasturtium, Parsley (Dried), Rosemary, Sage, Savory (Summer and Winter), Sweet Bay, Tansy, Tarragon, Thyme, Wintergreen, Woodruff and Wormwood.

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, loopers, mites, saltmarsh caterpillar, thrips, whiteflies

25/90

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

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**Hops and Dried Cones**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, loopers, mites, thrips, whiteflies

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**Leafy Vegetables**

Arugula, Celery, Corn Salad, Cress, Dandelion, Dock, Edible Chrysanthemum, Endive, Fennel, Head Lettuce, Leaf Lettuce, Parsley, Purslane, Radicchio, Rhubarb, Spinach and Swiss Chard

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, cabbage looper, cutworms, diamondback moth, loopers, cutworm species, green cloverworm, mites, Psyllids, seed corn maggot, stink bugs, symphylans, thrips, tobacco budworm, wireworms

Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or as an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with drip applications where available may be necessary on a 10 to 14 day schedule. Please refer to drip chemigation instructions.

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**Leaves of Root and Tuber Vegetables**

Beets and Turnips

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, cabbage looper, diamondback moth, Psyllids, stink bugs, whiteflies

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**Legume Vegetables (Succulent or Dried) and grain crops**

Adzuki Bean, Blackeyed Pea, Beans, Chickpea, Cowpea, Crowder Pea, Edible-Pod Pea, English Pea, Fava Bean, Field Bean, Field Pea, Garbonzo Bean, Garden Pea, Green Pea, Kidney Bean, Lentils, Lima Bean, Lupins, Mung Bean, Navy Bean, Peas, Pigeon Pea, Pinto Bean, Runner Bean, Snap Bean, Snow Pea, Soybean, Sugar Snap Pea, Tepary Bean, Wax Bean, and Yardlong Bean

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, corn earworm, green cloverworm, loopers, podworms, cabbage looper, soybean looper, velvetbean caterpillar, stink bugs, mites, leafhoppers, whiteflies, thrips, bean leaf beetle and Mexican bean beetle, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles

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**SEED TREATMENT FOR LEGUMES**

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per 100 lbs seed applied according to the directions in the SEED TREATMENT USE DIRECTIONS for the suppression of soil dwelling pests including cutworms, seed maggots, symphylans, wireworms and plant-parasitic nematodes.

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**Oilseed Crops**

Canola, Safflower, Sunflower (including Sunflower Grown for Seed)

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, diamondback moth, loopers, mites, saltmarsh caterpillar, thrips, Heliothis, headworms, whiteflies

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**Peanut**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, burrowing bug, cabbage looper, corn earworm, cutworm, soybean looper, green cloverworm, European corn borer, mites, podworms, red-necked peanut worm, saltmarsh caterpillar, seed corn maggot, thrips, velvetbean caterpillar, whiteflies, wireworms

Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or as an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with a layby application at pegging stage may be necessary for additional suppression of nematodes

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**Peppermint**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Loopers, saltmarsh caterpillar, armyworms

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**Pineapple**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Gummosos-Batracheda Comosae (Hodges), Thecla-Thecla Basilides (Geyr)(Fruitborer)

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**Pome Fruit**

Apples, Crabapple, Loquat, Mayhaw, Pears and Quince

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, leaf rollers (including fruit tree, oblique banded, red banded, variegated), codling moth, oriental fruit moth, tufted apple budmoth, light brown apple moth, mealybugs, per psylla, San Jose scale, stink

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

bugs, thrips, whiteflies, mites, plum curculio, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles

Application timing: optimal timing for leaf rollers, codling moth, and oriental fruit moth can vary between species and geographic locations. Monitor moth flights with pheromone traps and scout regularly to determine larval populations. Use a 7-10 day re-treatment schedule to maintain control if the crop is growing rapidly or if there is heavy pest pressure. CHROMO BIO-INSECTICIDE™ can be used to supplement mating disruption programs.

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**Pomegranate**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Armyworms, cankerworms, codling moth, cutworms, filbert leafroller, fruit tree leafroller, gypsy moth, oblique banded leafroller, oriental fruit moth, red banded leafroller, tufted apple budmoth, twig borer, variegated leafroller, walnut caterpillar, European red mite, McDaniel spider mite, Pacific spider mite, two-spotted red mite, stink bugs, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles

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**Root and Tuber Vegetables**

**Artichoke, Black Salsify, Carrot, Cassava, Celeriac, Chayote Root, Chicory, Chinese Artichoke, Edible Burdock, Garden Beet, Ginger, Ginseng, Horseradish, Jerusalem Artichoke, Oriental Radish, Parsnip, Potatoes, Radish, Rutabaga, Salsify, Skirret, Spanish Salsify, Sugar Beet, Sweet Potatoes, Tumeric, Turnip, Turnip-rooted Chervil, Turnip Rooted Parsley and Yams**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, artichoke plume moth, Colorado potato beetle, cutworms, European corn borer, loopers, potato aphid, potato leafhopper, psyllids, seed corn maggot, stink bugs, symphylans, whiteflies, wireworms

Colorado potato beetle larvae – apply to newly hatched to 2<sup>nd</sup> instar larvae. If adult beetles are also present, tank-mix with a knockdown insecticide. Heavy infestations require repeat application.

Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or as an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with chemigation where available may be necessary on a 10 to 14 day schedule. Please refer to chemigation instructions.

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**Shade and Ornamental Trees**

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre or ¼-2 gallons of CHROMO BIO-INSECTICIDE™ per 100 gallons of water

Aphids, Blackheaded budworm, California oakworm, Douglas fir tussock moth, elm leaf beetle, elm spanworm, fruittree leafroller, greenstriped mapleworm, gypsy moth, hemlock looper, imported willow leaf beetle, Jack Pine Budworm, lace bugs, Mimosa Webworm, mites, pine butterfly, saddleback caterpillar, saddle prominent caterpillar, spruce budworm, tent caterpillar, viburnum beetle, western tussock moth, whiteflies, wooly adelgid

Elm leaf beetle, imported willow leaf beetle, viburnum beetle – apply to newly hatched to 2<sup>nd</sup> instar. If adult beetles are also present, tank-mix with a knockdown insecticide. Heavy infestations may require repeat applications.

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**Stone Fruits**

Apricots, Cherry, Nectarine, Peach, Plum, and Prune

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, flea beetles, fruit flies, Green fruitworm, leafrollers (including oblique-banded, fruit tree, pandemic, redbanded, and variegated), adult Japanese beetles, Mealybugs, mites, oriental fruit moth, redhumped caterpillar, San Jose scale, stink bugs, tent caterpillar, peach twig borer, spotted wing drosophila, thrips, whiteflies, white peach scale

Application timing: optimal timing for peach twig borer and leafrollers can vary between species and geographic locations. Monitor moth flights with pheromone traps and scout regularly to determine larval populations. Use a 7-10 day re-treatment schedule to maintain control if the crop is growing rapidly or if there is heavy pest pressure. Use a 3- to 4-day re-treatment schedule at flowering. CHROMO BIO-INSECTICIDE™ can be used to supplement mating disruption programs.

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**Strawberry**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, armyworms, cutworms, leafrollers, Lygus, mites, thrips, whiteflies and stink bugs, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles, symphylans, wireworms

Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or as an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with drip application where available may be necessary on a 10 to 14 day schedule. Please refer to drip chemigation instructions.

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

**Sugar cane**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

White grubs and wireworms

Apply ¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre or 1.8 – 7.35 ounces per 1000 foot row in a 5 – 7 inch band (T-band) directly on the seed piece and surrounding soil in the open furrows immediately before covering with soil.

**Tobacco**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphid, cutworms, hornworms, loopers, mites, seed corn maggot, symphylans, thrips, tobacco budworm, whiteflies, wireworms

Root Knot, Lesion, Ring, Sting and Stunt Nematodes

For control of low to medium infestation levels of soil insects and nematodes use a pre-plant or at plant in-furrow drench application in 100 to 150 gallons of water per acre or as an in-furrow spray in 20 to 50 gallons per acre. When very high pest infestation levels are anticipated or encountered other effective soil treatments may be necessary. Supplemental control with drip application where available may be necessary on a 10 to 14 day schedule. Please refer to drip chemigation instructions.

**Tree Farms and Plantations**

Conifers, Including Christmas Trees and Deciduous trees

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre or ¼-2 gallons of CHROMO BIO-INSECTICIDE™ per 100 gallons of water

Bagworm, cottonwood leaf beetle, fall webworm, gypsy moth, hemlock looper, jackpine budworm, pine tip moth, rehumped caterpillar, spruce budworm, tent caterpillar, tussock moths

Cottonwood leaf beetle – apply to newly hatched to 2<sup>nd</sup> instar larvae. If adult beetles are also present, tank-mix with a knockdown insecticide. Heavy infestations may require repeat application.

**Tree Nuts and Pistachios**

Almonds, Cashew, Chestnut, Filbert (Hazelnut), Macadamia Nut, Pecan, Pistachios, and Walnut

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Aphids, fall webworm, filbert worm, hickory shuckworm, Mealybugs, navel orange worm, oblique-banded leafroller, peach twig borer, pecan nut casebearer, redhumped caterpillar, San Jose scale, walnut scale, whiteflies, Pecan weevil, mites

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

**Tropical and Subtropical Fruit**

Acerola, Atemoya, Avocado, Biriba, Black Sapote, Canistel, Cherimoya, Custard Apple, Feijoa, Guava, Ilima, Jaboticaba, Kiwi, Longan, Lychee, Mamey Sapote, Mango, Papaya, Passionfruit, Pulasan, Rambutan, Sapodila, Soursop, Spanish Lime, Star Apple, Starfruit, Sugar Apple, Ti Palm Leaves, Wax Jambu (Wax Apple), and White Sapote

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre

Avocado leafroller, citrus peelminer, cutworms, fruittree leafroller, omnivorous leafroller, orange tortrix, western tussock moth, Aphids, thrips, whiteflies, stink bugs, spotted wing drosophila, fruit flies, flea beetles, adult Japanese beetles

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**Turf, Including Turf Grown for Seed, Lawns and Recreational Turf**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per acre or ½-1 ounce per 1000 sq. ft.

Armyworms, cutworms, chinch bug, leafhoppers, sod webworms, White grubs (such as larvae of Asiatic garden beetle, black turfgrass ataenius, European chafer, green June beetle, Aphodius spp., May or June beetles (Phyllophaga spp.), norther and southern masked chafers (Cyclocephala spp.), sugarcane grub (Tomarus spp.) and Oriental beetle), annual bluegrass billbug adults and larvae

Mix specified dosage of CHROMO BIO-INSECTICIDE™ in sufficient water to provide thorough coverage of turf. For control of white grubs and annual bluegrass weevils, a minimum of 100 gallons of water per acre or 300 fluid ounces per 1000 square feet is recommended. For best control, thoroughly irrigate following irrigation to moisten the top inch of soil. There should be no more than ½ inch of thatch present at the time of application. Under dry conditions where thatch is present, pre-watering is recommended prior to application for grub or weevil control. For control of armyworms, cutworms, webworms, chinch bugs or leafhoppers it is not necessary to irrigate following application.

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**Poultry Houses**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per 12 gallons of water

Flies and Poultry litter beetle

Treat at time of litter replacement. Apply to walls, ceiling and floors of the poultry house. Replace litter only after all treated surfaces are dry.

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**Control of Household Pests (Outdoors)**

¼-2 gallons of CHROMO BIO-INSECTICIDE™ per 12 gallons of water

Boxelder beetle and brown marmorated stinkbug

31/90

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

Harmless insects become nuisances when searching indoors for hibernation sites in the fall. Treat door thresholds, window ledges, roof eaves, home siding and other areas where the insects congregate or may gain entry.

(Note to reviewer: The following separate sections to be used in a separate commercial/non-ag sublabel.)

**STRUCTURAL PEST CONTROL APPLICATIONS**

Chromo Bio-Insecticide can be applied to the exterior of commercial or residential structures at a rate of 0.004-0.008 gallons (1/2-1 oz) per 1,000 square feet (1/4-2 gallons per 100 gallons of water) against boxelder beetle and brown marmorated stinkbug. Treat door thresholds, window ledges, roof eaves, home siding and other areas where insects congregate or may gain entry.

**POULTRY HOUSE APPLICATIONS**

[Chromo Bio-Insecticide] [This product] can be applied to poultry houses when litter is replaced. Apply at a rate of 0.004-0.008 gallons (1/2-1 oz) per 1,000 square feet (1/4-2 gallons per 100 gallons of water) against flies and poultry litter beetle. Apply to walls, ceiling, and floors of the poultry house. Replace litter only after all treated surfaces are dry.

**GOLF COURSE TEES, GREENS, AND FAIRWAYS, COMMERCIAL AND RESIDENTIAL LAWNS, ATHLETIC FIELDS, PARKS, CEMETERIES, AND TURF LANDSCAPE APPLICATIONS**

[Chromo Bio-Insecticide] [This product] can be applied to all cool and warm season grasses to control the target insect pests identified in the table below. Apply Chromo Bio-Insecticide via foliar or ground spray at a rate of 1/4-2 gallons (1/2-1 oz) per acre (0.004-0.008 gallons (1/2-1 oz) per 1,000 square feet) with sufficient water to provide thorough coverage of turf. Repeat application at an interval sufficient to maintain control, usually 3-14 days depending upon plant growth rate, insect and mite activity, and other factors. For control of white grubs and annual bluegrass weevils, a minimum of 100 gallons of water per acre or 300 fluid ounces per 1,000 square feet is recommended. For best control of grubs, thoroughly irrigate following application to moisten the top inch of soil. There should be no more than 1/2 inch of thatch present at the time of application. Under dry conditions where thatch is present, pre-watering is recommended prior to application for grub or weevil control. For control of army worms, cutworms, webworms, chinch bugs, or leafhoppers, it is not necessary to irrigate following application.

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

Grass type	Target Insect	Product Use Rate	Application Instructions
<b>Bluegrass</b> <b>Bentgrass</b> <b>Bermuda grass</b> <b>Dichondra</b> <b>Fescue</b> <b>Orchard grass</b> <b>Poa Annua</b> <b>St. Augustine</b> <b>Ryegrass</b> <b>Zoysia</b> <b>Mixtures</b> <b>and other grasses</b> <b>or ornamental turf</b> <b>or grasses grown</b> <b>for seed</b>	<p>Armyworms, cutworms, sod webworms, chinch bugs, leafhoppers, annual bluegrass billbugs adult and larvae</p> <p>White grubs (larvae of Asiatic garden beetle, black turfgrass ataenius, European chafer, green June beetle, Aphodius spp., May or June beetles (Phyllophaga spp.), northern and southern masked chafers (Cyclocephala spp.), sugarcane grub (Tomarus spp.), and Oriental beetle)</p> <p>Root Knot, Lesion, Ring, Sting, Stunt Nematodes</p>	<p>1/4-2 gallons per acre (0.004-0.008 gallons (1/2-1 oz) per 1,000 sq. ft.)</p> <p>1/4-2 gallons per acre (0.004-0.008 gallons (1/2-1 oz) per 1,000 sq. ft.)</p> <p>1/4-2 gallons per acre (0.004-0.008 gallons (1/2-1 oz) per 1,000 sq. ft.)</p>	<p>Repeat at 3-14 day intervals</p> <p>Repeat at 3-14 day intervals</p> <p>Irrigate following application</p> <p>Use a pre-plant or at plant drench application in 100 to 150 gallons of water per acre (XX-XX gallons of water per 1,000 sq. ft.) for control of low to medium infestation levels.</p> <p>Other effective soil treatments may be needed for high infestation levels.</p> <p>Supplemental control of infestation levels with drench applications may be necessary.</p>

**INTERIORSCAPES, HERBACEOUS AND WOODY ORNAMENTALS, PLANTS, TREES, AND SHRUB APPLICATIONS**

[Chromo Bio-Insecticide] [This product] can be applied to all herbaceous and woody ornamentals, plants, trees, shrubs, and interiorscapes to control the target insect pests identified in the table below. Apply Chromo Bio-Insecticide via foliar spray at a rate of 1/4-2 gallons per 100 gallons of water with sufficient water to provide complete coverage but not excessive to the point of runoff. Repeat application at an

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

interval sufficient to maintain control, usually 3-14 days depending upon plant growth rate, insect and mite activity, and other factors. For control of white grubs and annual bluegrass weevils, a minimum of 100 gallons of water per acre or 300 fluid ounces per 1,000 square feet is recommended. For best control of grubs, thoroughly irrigate following application to moisten the top inch of soil. There should be no more than ½ inch of thatch present at the time of application. Under dry conditions where thatch is present, pre-watering is recommended prior to application for grub or weevil control. For control of army worms, cutworms, webworms, chinch bugs, or leafhoppers, it is not necessary to irrigate following application.

Plant type	Target Insect	Product Use Rate	Application Instructions
<b>Ornamentals</b> <b>Herbaceous Ornamentals</b> <b>Flowering Plants</b> <b>Foliage Plants</b>  <b>Woody Ornamentals</b> <b>Broadleaves, Shrubs and Trees, Conifers, Shrubs and Trees</b>	Loopers, tobacco budworm, omnivorous looper, omnivorous leafroller, diamondback moth, armyworm, ello moth, lo moth, oleander moth, azalea caterpillar, whiteflies, aphids, thrips, mites, Mealybugs, scales, Blackheaded budworm, California oakworm, Douglas fir tussock, moth, Spanworm, fruittree leafroller, Green-striped mapleworm, hemlock looper, Jack Pine Budworm, Mimosa Webworm, pine butterfly, saddleback caterpillar, saddle prominent caterpillar, spruce budworm, tent caterpillar, western tussock moth  Root Knot, Lesion, Ring, Sting, Stunt Nematodes	1/4-2 gallons per acre (0.004-0.008 gallons (1/2-1 oz) per 1,000 sq. ft.)  1/4-2 gallons per acre (0.004-0.008 gallons (1/2-1 oz) per 1,000 sq. ft.)	Repeat at 3-14 day intervals  Use a pre-plant or at plant drench application in 0.004-0.008 gallons (1/2-1 oz) of water per 1,000 sq. ft. for control of low to medium infestation levels.  Other effective soil treatments may be needed for high infestation levels.  Supplemental control of infestation levels with drench applications may be necessary.

3p/40

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage and disposal.

**Pesticide Storage:** Store in a dry, cool place out of direct sunlight and away from heat sources. Keep from overheating or freezing. Optimum storage temperature is 40°F to 85°F.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments by industry).

**Container Handling:** Non-refillable container. Do not reuse or refill this container.

*(Note to Reviewer: These instructions for plastic rigid containers less than 5 gallons small enough to shake):* Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for late use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

(OR)

*(Note to Reviewer: These instructions for plastic rigid containers greater than 5 gallons too large to shake):* Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Pour rinsate into application equipment or mix tank or store rinsate for late use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill or by incineration.

**LIMITED WARRANTY/DISCLAIMER**

Seller warrants that this product complies with the specifications expressed on this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended purpose. To the extent consistent with applicable law, Sellers liability for default, breach or failure under this law shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

35/40

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

**Sublabel B: Residential/Home & Garden Use**

(Front Panel)

**CHROMO™ BIO-INSECTICIDE**

**(Alternate Brand Names: TBD)**

**ACTIVE INGREDIENT:**

<i>Chromobacterium subtsugae</i> strain PRAA4-1 <sup>T</sup> cells and spent fermentation media*	100.00%
TOTAL	100.00%

\*Contains not less than 1 X 10<sup>6</sup> colony forming units per gram. [The percent active ingredient does not indicate product performance and potency measurements are not federally standardized.]

**KEEP OUT OF REACH OF CHILDREN**

See [back] [side] [other] panel for [additional precautionary statements] [and directions for use].

EPA Reg. No.: 73314-10

EPA Establishment No.: 73314-TX-001

[NOVOZYMES RETHINK TOMORROW] [LOGO]

Novozymes BioAg, Inc.

13100 W. Lisbon Road, Suite 600

Brookfield, Wisconsin 53005

(XXX) XXX-XXXX

Net Contents:

[Lot] [Batch] [No][Expiry date – 11 months from date of manufacture stamp or date stamp is 11 months from date of manufacture] (Note to reviewer: Lot or Batch number may appear on label or printed directly on packaging.)

(Note to Reviewer: First Aid Statements and Signal Word removed since all acutes are Tox Category IV.)

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

**(Back Panel)**

**Environmental Hazards:** To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**PRODUCT INFORMATION:**

[Chromo Bio-Insecticide] [This product] is a biological insecticide/miticide containing fermentation solids of Chromobacterium subtsugae strain PRAA4-1<sup>T</sup> for use on ornamental plants, turf and edible crops against the pests listed in this label. [Chromo Bio-Insecticide] [This product] functions primarily as a stomach disrupter for use in the control or suppression of many foliar-feeding pests, including caterpillars, foliage-feeding coleopteran, chrysomelidae, lepidopterae, aphids, whiteflies and plant-sucking mites. [Chromo Bio-Insecticide] [This product] must be mixed with water and applied as a foliar spray for control of above-ground pests or applied as a soil drench for control of surface or below-ground pests. Close scouting and early attention to insect infestations are necessary for application timing and effective control.

**HOME AND GARDEN USE DIRECTIONS**

**APPLICATION DIRECTIONS (HOW TO APPLY):**

**WHEN TO USE**

For best results apply [Chromo Bio-Insecticide] [This product] before populations reach damaging levels or when egg deposition is observed.

**BEFORE YOU USE**

Read and follow these directions when using:

Do not allow spray to drift from application site.

Use only with pressurized hand-held sprayers, spray trigger bottles, or hose-end sprayers.

Do not allow spray mixture to stand overnight or for prolonged periods.

[Chromo Bio-Insecticide] [This product] can be applied in commonly used pressurized hand-held sprayers, spray trigger bottles and hose-end sprayers.

**HOW TO USE FOR HAND-HELD SPRAYERS AND SPRAY TRIGGER BOTTLES**

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

Fill sprayer or bottle with appropriate amount of water and concentrate.

Mix the spray solution thoroughly.

Keep the spray solution agitated during application.

**HOW TO USE FOR HOSE-END SPRAYERS**

Follow hose-end sprayer instructions to determine how to fill, set dial, clean and disconnect from hose.

Set dial on sprayer to deliver rate as directed below.

**INSECTS CONTROLLED/SUPPRESSED ON VEGETABLES, FRUITS, NUTS, ORNAMENTAL PLANTS, TREES, SHRUBS, FLOWERS, FOLIAGE, AND TROPICAL PLANTS**

Adult Japanese beetles, Alfalfa caterpillar, Alfalfa webworm, Adelgids, Aphids, Armyworms, Cabbage looper, Chinch bugs, Codling moth, Corn earworm, Diamondback moth, Fruit flies, Hornworms, Imported cabbageworm, Lace bugs, Leaf rollers, Leafhoppers, Light brown apple moth, Loopers, Mealybugs, Mites, Plant bugs, Psyllids, Scales, Sharpshooters, Spittle bugs, Stink bugs, Tent caterpillars, Thrips, Tufted apple budworm, Webworms, and Whiteflies

**FOR FOLIAR SPRAY**

For suppression of listed pests, apply [Chromo Bio-Insecticide] [this product] as a foliar spray at the rate of 2 ounces (4 tablespoons) per gallon of water. Spray leaves, stems, and new shoots to runoff providing complete coverage of entire plant. For individual plants such as tomatoes and peppers, apply as a soil drench at the rate of 4 ounces per plant.

**FOR [SUPPRESSION] [CONTROL] OF SOIL-BORNE PESTS (EXCLUDING TURF):**

For suppression of soil-borne pests including seed maggots, wireworms, symphylans, cutworms, white grubs and plant-parasitic nematodes, apply [Chromo Bio-Insecticide] [this product] as a soil drench directly into the seed furrow. Mix [Chromo Bio-Insecticide] [this product] at rate of 3 tablespoons per gallon of water and apply the mixture at the rate of 1 quart (32 fluid ounces) per 25 feet of row. For individual plants such as tomatoes and peppers; apply as a soil drench at the rate of 4 ounces per plant.

**FOR [SUPPRESSION] [CONTROL] OF INSECT PESTS OF TURF:**

For suppression of turf pests including webworms, cutworms, chinch bug, and leafhoppers apply [Chromo Bio-Insecticide] [this product] at the rate of 3 ounces (6 tablespoons) per gallon of water and apply to turf with a pressurized sprayer at the rate of 1 gallon per 250 square feet of turf. For these target pests, no irrigation (watering-in) is necessary following [Chromo Bio-Insecticide] [product] application.

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

For suppression of turf pests including white grubs (including green June beetle, Aphodius spp., May or June beetles (Phyllophaga spp.), northern and southern masked chafers (Cyclocephala spp.), sugarcane grub (Tomarus spp.), Oriental beetle, annual bluegrass weevil adult and larvae mix [Chromo Bio-Insecticide] [this product] at the rate of ½ pound (8 ounces) (16 tablespoons) per gallon of water and apply at the rate of 1 gallon per 250 square feet of turf. For best control, thoroughly water-in following application to moisten the top inch of soil. There should be no more than ½ inch of thatch present at the time of application. Under dry conditions where thatch is present, pre-watering is recommended prior to application for grub or weevil control. For best results, target smaller first and second instar grubs during late summer and early fall.

Repeat all applications at an interval sufficient to maintain control, usually 3-10 days depending upon plant growth rate, insect and mite activity, and other factors. If attempting to control an insect population with a single application, make the treatment when egg hatch is essentially complete but before severe damage occurs.

Some pesticides can cause phytotoxic effects ranging from slight burning or browning of leaves to distorted leaves, fruit, flowers, or stems. Damage symptoms may vary with the type of plant that has been treated. It is impossible to test all plant species for phytotoxicity. To assure that the plants to be treated are not sensitive to the treatment, apply a small amount of the product to a few leaves or the above ground portion of the plant and check back in 2-4 days for signs of phytotoxicity. Use product according to label directions.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a dry, cool area inaccessible to children and out of direct sunlight and away from heat sources. Keep from overheating and freezing. Optimum storage temperature is 40°F to 85°F.

**PESTICIDE DISPOSAL AND CONTAINER HANDLING:** Nonrefillable container. Do not reuse or refill this container. **If empty:** Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency or (800) 858-7378 (National Pesticide Information Center) for disposal instructions. Never place unused product down any indoor or outdoor drain.

**LIMITED WARRANTY/DISCLAIMER**

Seller warrants that this product complies with the specifications expressed on this label. To the extent consistent with applicable law, Seller makes no other warranties, and disclaims all other warranties, express or implied, including but not limited to warranties of merchantability and fitness for the intended

(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

purpose. To the extent consistent with applicable law, Sellers liability for default, breach or failure under this law shall be limited to the amount of the purchase price. To the extent consistent with applicable law, Seller shall have no liability for consequential damages.

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(Note to Reviewer: [bracketed text] is optional or alternate wording, (parenthetical text) is informational.)

## OPTIONAL LABEL CLAIMS

- [Effective] Biological Larvicide
- [Effective] Biological Miticide
- [Effective] Biological Insecticide
- [Effective] Biological Nematicide
- Liquid Suspension
- For Liquid Spray Applications
- For Use In Organic Farming
- For Organic Production
- For Organic Gardening
- For Organic Lawn Care
- For Use in Organic Production
- OMRI logo
- 100% Soluble. Will not clog machinery.
- Pest control achieved through repellency, oral toxicity, and reduced egg hatch
- Broad spectrum control
- Useful [asset] [tool] for integrated pest management
- Easy integration into current [integrated pest management] [IPM] programs
- Compatible with [integrated pest management] [IPM] programs
- Single bacterium with complex modes of action [to [target] [listed] pests]
- For Greenhouse, Nursery, Interiorscapes, Agriculture and Turf
- Use on Roses, Vegetables, Fruits, Flowering Plants, Trees and Shrubs.
- For Home, Garden and Lawn Care Use
- Easy To Use
- Easy on beneficials
- For use on turfgrass and outdoor ornamental plants, interiorscapes and gardens on or around sites such as golf courses, residential & commercial lawns, athletic fields, parks, cemeteries, sod farms and similar locations.
- For use on all major agricultural crops including alfalfa (hay, forage), bean (all types), cereals, corn (all types), oilseeds (canola, sunflower, safflower, peanut, etc), peanut, peas (dry, fresh, sweet), potato, soybean and sugarbeet.
- 100% water soluble formula.